

SIGA-REL Releasing Module





Releasing Module

Applications

- **Water\foam\ sprinkler**
 - pre-action
 - deluge
 - foam
- **Agent/gas release**
- **No squibs**

Agency Listings

- **EST3, EST2**
- **ULI, ULC, FM, CSFM, MEA, LPC, CE**

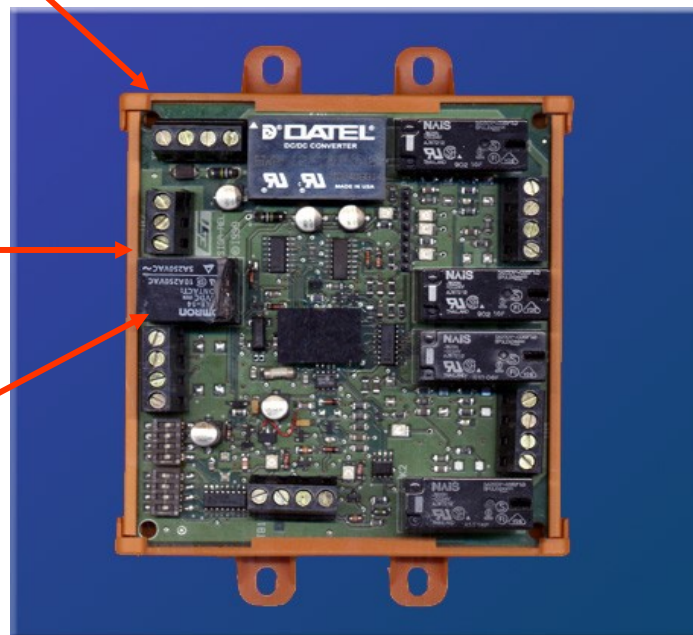
SQUIBS



Releasing Module

Features

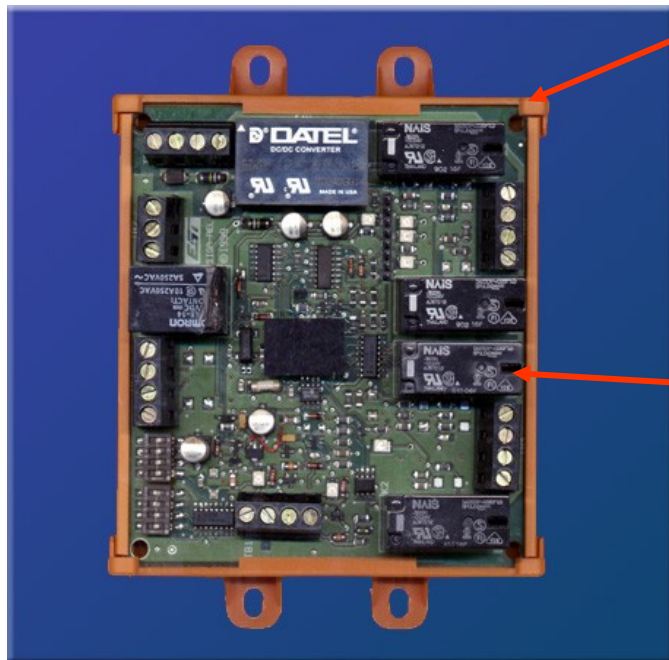
- 1 form C auxiliary (1st alarm) room prep relay contact (3A @ 24Vdc, resistive load)
- 1 supervised manual release station circuit for NO contact
- 1 supervised abort circuit for NO contact



Releasing Module

Features (cont'd)

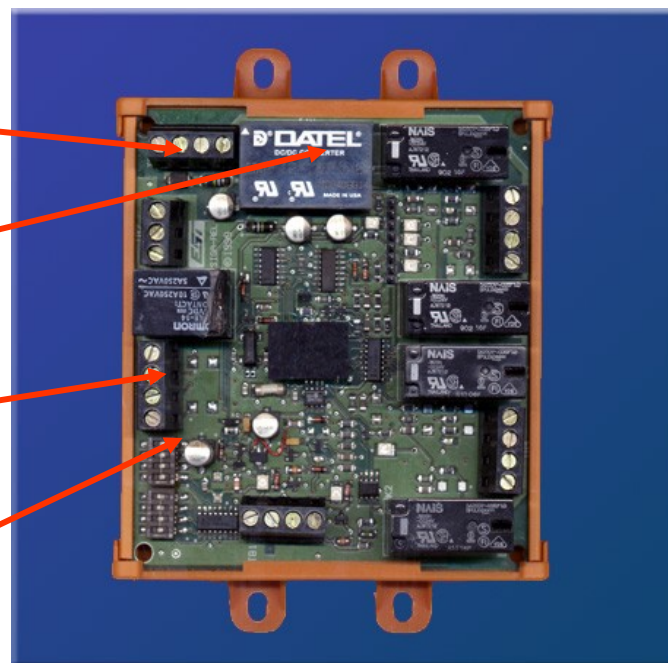
- 2 supervised class B pre-release alarm circuits (3A@24Vdc)
 - one steady for audible or visual signal; one pulsed for audible signal
- 2 supervised class B release circuits (3A@24Vdc)



Releasing Module

Features (cont'd)

- Input power from riser = 4A@24Vdc (power limited)
- Input / output socket for front panel display / key switch (future)
- Operating timers set with dip switches
- Operating modes set with dip switches





Releasing Module

Normal state

- **Supervises releasing device and release circuit wiring**
- **Supervises wiring of pre-release alarm circuit**
- **Open or short initiates TROUBLE condition**
 - **Short circuit prior to operation of pre-alarm, release, or output circuit inhibits the output operation**
 - **Short circuit on one pre-release, release, or output circuit does not inhibit operation of the other**



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Automatic operation

- Sequence begins with 1st alarm from detector in protected area
- Pre-release alarm audible circuits activate at 15ppm (slow rate)
- Pre-release alarm visual circuits activate at steady rate
- Auxiliary relay contacts activate



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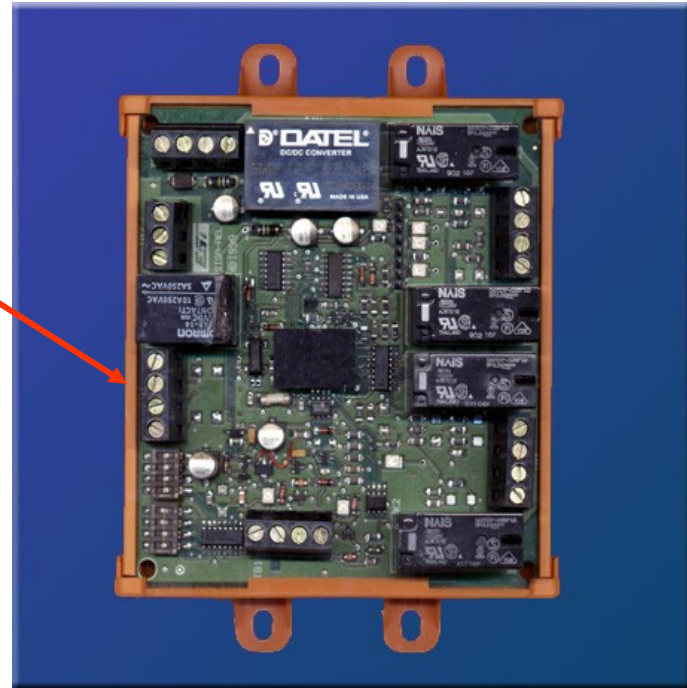
Automatic operation (cont'd)

- Alarm from 2nd detector initiates automatic delay timer (0-60 sec, adjustable)
- Pre-release alarm audible circuits change to 60ppm (fast rate) then to steady at 10sec mark
- Release circuits activate upon expiration of automatic delay timer
 - when release occurs, pre-release alarm circuits continue operating at steady

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Abort operation

- 4 abort modes
- mode determined by dip switches





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Abort operation: mode 1 (default)

- Automatic delay timer continues to run while abort is active
- Release is prevented if abort is initiated before automatic delay timer expires
- If abort is restored, release occurs when automatic delay timer expires or, abort delay timer (0 or 10sec, selectable) expires, whichever occurs last

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Abort operation: mode 2

- **Automatic delay timer stops running**
- **Automatic delay timer resumes when abort is restored**
- **Release is prevented if abort is initiated before automatic delay timer expires**
- **Release occurs when automatic delay timer expires**



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Abort operation: mode 3 (IRI)

- A recognized abort disables the automatic delay timer
- To be recognized, abort must be active when the automatic command (2nd alarm) is received
- If abort is restored, release occurs when abort delay timer (10sec, default) expires

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Abort operation: mode 4 (Int'l.)

- The automatic delay timer stops running
- Automatic delay timer resets when abort is restored; timing commences from beginning ($t=0$)
- Release is prevented if abort is initiated before automatic delay timer expires
- Release occurs when the automatic delay timer expires



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Manual operation

- **Sequence begins when manual release station is activated**
 - **manual release disables any automatic operation or abort function**
- **Pre-release alarm circuits activate at 60ppm (fast rate) then steady rate at 10sec; auxiliary relay contacts activate**



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Manual operation (cont'd)

- **Manual release timer starts (0, 10, 20, 30sec, selectable)**
- **Release circuits activate when the manual release timer expires**

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Accessories

- Abort switch
- Manual release station
- Service disconnect switch
- Releasing circuit end-of-line device

